

SUGAR RESEARCH FOUNDATION, INC.

MASSACHUSETTS INSTITUTE OF TECHNOLOGY

CAMBRIDGE 39, MASSACHUSETTS

ALLEN SCATTERGOOD
RESIDENT DIRECTOR

Dec. 31, 1947

Dr. Joshua Lederberg
Assistant Professor of Genetics
University of Wisconsin

Dear Dr. Lederberg,

This is in answer to your request of Dec. 23 addressed to Dr. Hockett who is now located at 52 Wall St., New York City.

The ethanolysis of sucrose yields crystalline glucose in good yield, and analytical methods indicate that the maximum yield of glucose may rise to above 90% under proper conditions. The other product is probably an ethyl fructoside mixture from which no crystalline products were isolated. Our only evidence for the existence of ethyl fructosides in this mixture is from hydrolysis and followed by copper reduction methods.

Glycosides, other than a few methyl glycosides, are probably unavailable. The only workers that we now have for preparing sugar derivatives are degree-seeking graduate students and the preparation of known sugar derivatives for the purpose of biological studies is not considered a suitable research topic in organic chemistry here. Furthermore results of biological studies usually are not ready by the time the student writes his thesis.

A large laboratory is needed staffed by capable sugar chemists whose main program would be to prepare sugar derivatives in sufficient quantity for biological and industrial experiments. Dr. Hockett is well aware of this need, but it may take a considerable time before such a program is in operation. I will keep you in mind in case we have any considerable samples of glycosides left over from any research program. In the meantime, I can only suggest that you make your own glycosides.

Sincerely

Allen Scattergood